

March 19, 2002

Mr. Craig Busenbark  
Cooper Tire and Rubber Company  
207 South West Street  
Auburn, Indiana 46706

Re: Significant Source Modification No:  
033-14752-00013

Dear Mr. Busenbark:

Cooper Tire and Rubber Company applied for a Part 70 operating permit on July 9, 1996 for a molded rubber products manufacturing plant. An application to modify the source was received on August 3, 2001. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

Three (3) injection molding presses (identified as IM-01, IM-02, and IM-03) each with a maximum throughput capacity of 116 pounds of rubber per hour.

One (1) transfer molding press (identified as TM-01) with a maximum throughput capacity of 180 pounds of rubber per hour.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Amanda Baynham, ERG, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, press 0 and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,  
Original signed by  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

ERG/AB

cc: File - DeKalb County  
U.S. EPA, Region V  
Northern Regional Office  
Air Compliance Section Inspector - Doyle Houser  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

# **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY**

**Cooper Tire & Rubber Company  
207 South West Street  
Auburn, Indiana 46706**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 033-14752-00013	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:  March 19, 2002

## TABLE OF CONTENTS

### SECTION A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

### SECTION B GENERAL CONSTRUCTION CONDITIONS

- B.1 Definitions [326 IAC 2-7-1]
- B.2 Effective Date of the Permit [IC13-15-5-3]
- B.3 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]
- B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

### SECTION C GENERAL OPERATION CONDITIONS

- C.1 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
- C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- C.4 Opacity [326 IAC 5-1]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]
- C.8 Compliance Requirements [326 IAC 2-1.1-11]
- C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.10 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.11 Emergency Provisions [326 IAC 2-7-16]
- C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
- C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

### SECTION D.1 FACILITY OPERATION CONDITIONS

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]
- D.1.3 Emissions of Volatile Organic Compounds (VOC) [326 IAC 8-1-6]
- D.1.4 Emissions of Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]
- D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

#### Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.6 Record Keeping Requirements
- D.1.7 Reporting Requirements

Certification  
Quarterly Report

## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

---

The Permittee owns and operates a stationary source that produces rubber products.

<b>Responsible Official:</b>	Plant Manager
<b>Source Address:</b>	207 South West Street, Auburn, IN 46706
<b>Mailing Address:</b>	207 South West Street, Auburn, IN 46706
<b>General Source Phone Number:</b>	(219) 927-3484
<b>SIC Code:</b>	3061
<b>County Location:</b>	DeKalb
<b>Source Location Status:</b>	Attainment for all criteria pollutants
<b>Source Status:</b>	Part 70 Permit Program Major Source under PSD Major Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

---

This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Three (3) injection molding presses (identified as IM-01, IM-02, and IM-03) each with a maximum throughput capacity of 116 pounds of rubber per hour.
- (b) One (1) transfer molding press (identified as TM-01) with a maximum throughput capacity of 180 pounds of rubber per hour.

### A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

---

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

### **B.1      Definitions [326 IAC 2-7-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### **B.2      Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

### **B.3      Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.4      Significant Source Modification [326 IAC 2-7-10.5(h)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (a) In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
  - (1) If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
  - (2) If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
  - (3) If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

## SECTION C GENERAL OPERATION CONDITIONS

### C.1 Certification ~~[326 IAC 2-7-4(f)]~~~~[326 IAC 2-7-6(1)]~~~~[326 IAC 2-7-5(3)(C)]~~

---

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

### C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] ~~[326 IAC 1-6-3]~~

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the

Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

**C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]**

---

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

**C.4 Opacity [326 IAC 5-1]**

---

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

---

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

**C.6 Operation of Equipment [326 IAC 2-7-6(6)]**

---

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

**Testing Requirements [326 IAC 2-7-6(1)]**

**C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]**

---

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

#### **Compliance Requirements [326 IAC 2-1.1-11]**

##### **C.8 Compliance Requirements [326 IAC 2-1.1-11]**

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

#### **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

##### **C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

---

If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

#### **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

##### **C.10 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]**

---

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
  - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:



- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
  - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and Northern Regional Office, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

IDEM, OAQ

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

Northern Regional Office

Telephone: (219) 245-4870

Telephone: (800) 753-5519

Facsimile Number: (219) 245-4877

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]

- 
- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
  - (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]**

---

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

### **C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

---

- (a) The reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

- (a) Three (3) injection molding presses (identified as IM-01, IM-02, and IM-03) each with a maximum throughput capacity of 116 pounds of rubber per hour.
- (b) One (1) transfer molding press (identified as TM-01) with a maximum throughput capacity of 180 pounds of rubber per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The combined throughput for the three (3) injection molding presses (identified as IM-01, IM-02, and IM-03) shall be limited to processing 1,044,000 pounds of rubber per twelve (12) consecutive month period. The throughput for the transfer molding press (identified as TM-01) shall be limited to 540,000 pounds of rubber per twelve (12) consecutive month period.
- (b) The VOC content of the primer coating used in the surface coating operations shall not exceed 6.12 pounds per gallon, as applied. The VOC content of the adhesive coatings used in the surface coating operations shall not exceed 6.64 pounds per gallon, as applied. The Permittee shall not exceed 0.08 pounds of coating VOC per finished part for the injection molding presses, and 0.02 pounds of coating VOC per finished part for the transfer molding press. Any changes to the surface coating operation that would increase the maximum amount of coating VOC per finished product requires prior approval from IDEM, OAQ.

Compliance with these conditions, limits VOC emissions from the three (3) injection molding presses (identified as IM-01, IM-02, and IM-03), the one (1) transfer molding press (identified as TM-01), the debottlenecking of the extrusion process, and the increased utilization of the existing equipment (including surface coating, rubber mixing, and grinding/finishing operations) to less than the Prevention of Significant Deterioration threshold of 40 tons per year. Therefore, compliance with this condition makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM emissions from the three (3) injection molding presses and the one (1) transfer molding press shall not exceed the following emission rates:

Facility Description	Process Weight (lbs/hour)	PM Emission Rate (lbs/hour)
Injection Molding Press	116.0	0.61
Transfer Molding Press	180.0	0.82

These emission limits were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

**D.1.3 Emissions of Volatile Organic Compounds (VOC) [326 IAC 8-1-6]**

---

Any change or modification which would increase the potential to emit VOC for any one of the three injection molding presses or for the transfer molding press to twenty-five (25) tons per year or more shall require prior approval from IDEM, OAQ and shall be subject to the requirements of 326 IAC 8-1-6.

**D.1.4 Emissions of Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1]**

---

Any change or modification which would increase the potential to emit for the three injection molding presses and the transfer molding press to ten (10) tons per year for a single HAP or twenty-five (25) tons per year for any combination of HAPs shall require prior approval from IDEM, OAQ and may be subject to the requirements of 326 IAC 2-4.1.

**D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]**

---

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for these facilities and their control equipment.

**Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.1.6 Record Keeping Requirements**

---

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records of monthly rubber usage.
- (b) To document compliance with Condition D.1.1(b), the Permittee shall maintain records of the following:
  - (1) The VOC content (as applied) of each primer and adhesive used in the surface coating operations associated with presses IM-01, IM-02, IM-03 and TM-01.
  - (2) Documentation showing that the maximum VOC usage per finished part for the surface coating operations is less than or equal to 0.08 pounds for the injection molding presses and 0.02 pounds of coating VOC per finished part for the transfer molding press, when using the worst case primer and adhesives.
- (c) To document compliance with Conditions D.1.3 and D.1.4, the Permittee shall maintain records of the estimated amount of VOC and HAPs emitted each month from each of the new injection molding presses and the new transfer molding press. Records shall include the amount of rubber processed by each of the new presses and the emission factors used to calculate the VOC and HAP emissions.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**D.1.7 Reporting Requirements**

---

A quarterly summary of the information to document compliance with Condition D.1.1(a) shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PART 70 SOURCE MODIFICATION  
CERTIFICATION**

Source Name: Cooper Tire & Rubber Company  
Source Address: 207 South West Street, Auburn, Indiana 46706  
Mailing Address: 207 South West Street, Auburn, Indiana 46706  
Source Modification No.: 033-14752-00013

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Branch**

**Part 70 Source Modification Quarterly Report**

Source Name: Cooper Tire & Rubber Company  
Source Address: 207 South West Street, Auburn, Indiana 46706  
Mailing Address: 207 South West Street, Auburn, Indiana 46706  
Source Modification No.: 033-14752-00013  
Facility: Injection Molding Presses (IM-01, IM-02, and IM-03)  
Parameter: Rubber Usage (tons/month)  
Limit: The total input of rubber to the three (3) injection molding presses (identified as IM-01, IM-02, and IM-03) shall be limited to 1,044,000 pounds per twelve (12) consecutive month period.

YEAR: \_\_\_\_\_

Month	Pounds of Rubber	Pounds of Rubber
	This Month	Last 12 Month Total
Month 1		
Month 2		
Month 3		

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.



**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
Compliance Branch**

**Part 70 Source Modification Quarterly Report**

Source Name: Cooper Tire & Rubber Company  
Source Address: 207 South West Street, Auburn, Indiana 46706  
Mailing Address: 207 South West Street, Auburn, Indiana 46706  
Source Modification No.: 033-14752-00013  
Facility: Transfer Molding Press (TM-01)  
Parameter: Rubber usage (tons/month)  
Limit: The total input of rubber to the transfer molding press (identified as TM-01)  
shall be limited to 540,000 pounds per twelve (12) consecutive month period.

YEAR: \_\_\_\_\_

Month	Pounds of Rubber	Pounds of Rubber
	This Month	Last 12 Month Total
Month 1		
Month 2		
Month 3		

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.  
Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_  
Title/Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

Attach a signed certification to complete this report.

**March 19, 2002**

**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Significant Source  
Modification.**

**Source Background and Description**

<b>Source Name:</b>	Cooper Tire & Rubber Company
<b>Source Location:</b>	207 South West Street, Auburn, IN 46706
<b>County:</b>	DeKalb
<b>SIC Code:</b>	3061
<b>Operation Permit No.:</b>	T033-6253-00013
<b>Operation Permit Issuance Date:</b>	Pending
<b>Significant Source Modification No.:</b>	033-14752-00013
<b>Permit Reviewer:</b>	ERG/AB

The Office of Air Quality (OAQ) has reviewed a modification application from Cooper Tire & Rubber Company relating to the construction of the following emission units and pollution control devices:

- (a) Three (3) injection molding presses (identified as IM-01, IM-02, and IM-03) each with a maximum throughput capacity of 116 pounds of rubber per hour.
- (b) One (1) transfer molding press (identified as TM-01) with a maximum throughput capacity of 180 pounds of rubber per hour.

**History**

On November 3, 2000, Cooper Tire & Rubber Company submitted an application to IDEM, OAQ requesting to add a new injection molding press to their existing plant. A significant Source Modification (003-12932-00013) was issued for the installation and operation of this new equipment. Cooper Tire & Rubber Company decided not to construct this unit and submitted a letter on September 20, 2001 to IDEM, OAQ requesting that the Significant Source Modification be withdrawn. On August 3, 2001, Cooper Tire & Rubber Company submitted an application to IDEM, OAQ requesting to add three new injection molding presses and one new transfer molding press to their existing plant. Cooper Tire & Rubber Company's Part 70 Permit has not yet been issued. The draft Part 70 permit will be revised to incorporate the new emission units and delete the injection molding press in the previous significant source modification.

**Enforcement Issue**

There are no enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 3, 2001. Additional information was received on September 12, 2001, September 24, 2001, and January 24, 2002.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (page 1 through 10).

## Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	4.9
PM-10	4.9
SO <sub>2</sub>	0.00
VOC	115
CO	0.00
NO <sub>x</sub>	0.00

HAPs	Potential To Emit (tons/year)
Xylene	7.96
Ethylbenzene	2.88
MIBK	49.5
Phenol	0.58
Toluene	38.3
Other	3.7
TOTAL	103

## Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10(f)(4)(D) because the potential to emit VOC is greater than twenty-five (25) tons per year.

## County Attainment Status

The source is located in DeKalb County.

Pollutant	Status
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. DeKalb County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) DeKalb County has been classified as attainment or unclassifiable for NO<sub>2</sub>, PM10, SO<sub>2</sub>, CO, and lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	12.1
PM-10	12.1
SO <sub>2</sub>	40.1
VOC	Greater than 250
CO	26.3
NOx	39.3

This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

These emissions are based upon the emissions reported in the Technical Support document for the Part 70 Permit (TO33-6253-00013).

### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
<b>New Equipment</b>							
Injection Molding Presses and Transfer Molding Press	0	0	0	5.29	0	0	1.08
<b>Emissions from Debottlenecking of Existing Equipment<sup>a</sup></b>							
Extruder: Future Potential Emissions	0	0	0	0.71	0	0	0.57
Extruder: Past Actual Emissions	0	0	0	0.65	0	0	0.46
Extruder: Future Potential minus Past Actual Emissions	0	0	0	0.06	0	0	0.05
<b>Emissions from Increased Utilization of Existing Equipment<sup>b</sup></b>							
Adhesive and Primer Coating	0.94	0.94	0	33.6	0	0	34.0
Rubber Mixing	0.73	0.73	0	0.35	0	0	0.11
Grinding/Finishing	0.002	0.002	0	0.014	0	0	0.017
Total	1.67	1.67	0	39.3	0	0	35.3
Significant Levels	25	15	40	40	100	40	--

<sup>a</sup> The installation of the transfer molding press debottlenecks the extrusion process.

<sup>b</sup> The installation of the three injection molding presses and the one transfer molding press does not represent a debottlenecking of the rubber mixing process, grinding/finishing, or the surface coating operations. The installation of the new presses result only in the increased utilization of these processes.

An increase in production will occur due to the addition of the three new injection molding presses and one new transfer molding press. This production increase will result in increased utilization at other operations at the plant. The increased utilization for each of the separate processes was based upon the following:

Process	Future Actual Emissions (tons/year)	Past Actual Emissions (tons/year)	Future Actual-Past Actual Emissions (tons/year)	Adjusted Difference (tons/year)
Adhesive and Primer Coating	371.4	273.27	98.1	33.6
Rubber Mixing	2.68	1.65	1.03	0.35
Grinding/Finishing	0.16	0.12	0.04	0.014
Total		275.0	99.17	34.0

The plant has voluntarily agreed to limit the throughput of rubber so the total VOC increase (new equipment plus increased utilization and debottlenecking) is 39.3 tons per year. As a result, the

limited emissions increase does not exceed 40 tons per year of VOC. Pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

### State Rule Applicability - Individual Facilities

#### 326 IAC 2-2 (Prevention of Significant Deterioration)

The installation of the new presses result in a potential VOC emissions increase greater than the 40 tons per year PSD threshold. Cooper Tire and Rubber has agreed to limit the VOC emissions increase to less than 40 tons per year by limiting the amount of rubber processed by the new presses and the amount of VOC applied in the surface coating operations (i.e., primer and adhesive applications). Hence, the three new injection molding presses will be limited to 1,044,000 pounds of rubber per year and the one new transfer molding press will be limited to 540,000 pounds of rubber per year. The VOC content of the primers and adhesives used in the surface coating operations associated with the new presses will be limited to 6.12 lbs/gallon and 6.64 lbs/gallon, respectively. Cooper has determined that the maximum amount of VOC per completed part is 0.08 lbs of coating VOC for the injection molding presses and 0.02 lbs for the transfer molding press. These maximum VOC amounts were calculated assuming the worst case primers and adhesives were applied to the product requiring the maximum amount of primers and adhesive application.

For VOC emissions from the application of primer and adhesive to the parts made in the new injection molding presses, the worst-case part consists of three inserts that have to be coated with primer and adhesive. The maximum amount of coating used for each insert is shown in the following table:

Insert	Primer (gallons/insert)	Adhesive (gallons/insert)
Insert 1	$2.5 \times 10^{-3}$	$3.38 \times 10^{-3}$
Insert 2	$2.0 \times 10^{-3}$	$2.0 \times 10^{-3}$
Insert 3	$1.0 \times 10^{-3}$	$1.54 \times 10^{-3}$
Total	$5.5 \times 10^{-3}$	$6.92 \times 10^{-3}$

Since this part consists of three inserts, it represents the maximum amount of paint required for a single manufactured part. Condition D.1.1(b) Limits the VOC content of the primer and adhesive to 6.12 lbs per gallon and 6.64 lbs/gallon, respectively. Hence, the maximum VOC emissions from the surface coating operation is calculated as follows:

$$\text{VOC Emission per part} = (5.5 \times 10^{-3} \text{ gallons/part}) (6.12 \text{ lbs/gallon}) + (6.92 \times 10^{-3} \text{ gallons/part})(6.64 \text{ lbs/gallon})$$

$$\text{VOC Emission per part} = 0.08 \text{ lbs per part}$$

Based on the rubber throughput limits in Condition D.1.1(a), each injection molding press can manufacture 246,060 of these parts per year. The total VOC emissions from the application of coatings to the parts made in the three new injection molding presses is calculated as follows:

$$\text{Total VOC per year} = 3(246,060 \text{ parts/yr}) (0.08 \text{ lbs/part}) (1 \text{ ton}/2000 \text{ lbs})$$

$$\text{Total VOC per year} = 29.5 \text{ tons/year}$$

For VOC emissions from the application of primer and adhesive to the parts made in the new transfer molding press, the worst-case part also consists of three inserts that have to be coated with primer and adhesive. The maximum amount of coating used for each insert is shown in the following table:

Insert	Primer (gallons/insert)	Adhesive (gallons/insert)
Insert 1	$4.0 \times 10^{-4}$	$5.0 \times 10^{-4}$
Insert 2	$9.1 \times 10^{-4}$	$1.25 \times 10^{-3}$
Insert 3	$9.6 \times 10^{-5}$	$9.6 \times 10^{-5}$
Total	$1.4 \times 10^{-3}$	$1.85 \times 10^{-3}$

Since this part consists of three inserts, it represents the maximum amount of paint required for a single manufactured part. Condition D.1.1(b) Limits the VOC content of the primer and adhesive to 6.12 lbs per gallon and 6.64 lbs/gallon, respectively. Hence, the maximum VOC emissions from the surface coating operation is calculated as follows:

$$\text{VOC Emission per part} = (1.4 \times 10^{-3} \text{ gallons/part}) (6.12 \text{ lbs/gallon}) + (1.35 \times 10^{-3} \text{ gallons/part}) (6.64 \text{ lbs/gallon})$$

$$\text{VOC Emission per part} = 0.02 \text{ lbs per part}$$

Based on the rubber throughput limits in Condition D.1.1(a), the transfer molding press can manufacture 405,000 of these parts per year. The total VOC emissions from the application of coatings to the parts made in the new transfer molding press is calculated as follows:

$$\text{Total VOC per year} = (405,000 \text{ parts/yr}) (0.02 \text{ lbs/part}) (1 \text{ ton}/2000 \text{ lbs})$$

$$\text{Total VOC per year} = 4.1 \text{ tons/year}$$

The total VOC emissions from surface coating parts for the three injection molding presses and one transfer molding press is equal to 33.6 tons/year (i.e., 29.5 tons/year plus 4.1 tons/year).

The VOC emissions from the presses, rubber mixing, grinding/finishing and extrusion operations are limited by the rubber throughput limits contained in Condition D.1.1(a). These operations contribute an additional 5.7 tons per year, when limited by the rubber throughput limitations. Hence, the total VOC emissions for the entire process is limited to 39.3 tons/year (i.e., 33.6 tons/year for the surface coating plus 5.7 tons/year for all other processes).

In conclusion, the combined effect of the rubber throughput limitations, the VOC content limits for primers and adhesives, and the VOC limit on the amount of VOC per finished part, limits VOC emissions from the new presses, debottlenecking of the extrusion process, and the increased utilization of existing equipment (including surface coating, rubber mixing and grinding/finishing

processes) to 39.3 tons per year. Since the VOC emissions increase is limited to less than 40 tons per twelve (12) consecutive month period, the provisions of 326 IAC 2-2 (Prevention of Significant Deterioration) are not applicable to this modification.

**326 IAC 8-1-6 (New Facilities)**

The provisions of 326 IAC 8-1-6 are not applicable to the three new injection molding presses and the one new transfer molding press because none of these facilities individually emit greater than 25 tons of VOC per year. This rule is not applicable to the existing equipment because the existing units were constructed prior to January 1, 1980.

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)**

This rule is not applicable to the new injection molding presses and the transfer molding press because these units have single/combined HAP emissions less than ten (10)/twenty-five (25) tons per year. Additionally, rule 326 IAC 2-4.1 would not apply to the increased HAP emissions for increased utilization because this would be a modification and 326 IAC 2-4.1 does not apply to modifications.

**326 IAC 6-3-2 (Process Operations)**

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the injecting molding presses (identified as IM-1, IM-2, and IM-3) and the transfer molding press (identified as TM-1) shall be limited as follows:

Facility	Process Weight (lbs/hour)	PM Emission Rate (lbs/hour)
Injection Molding Presses	116.0	0.61
Transfer Molding Press	180.0	0.82

These limits were calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

**Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.



There are no compliance monitoring requirements applicable to this modification.

### **Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No.033-14752-00013.

# **Appendix A: Emissions Calculations** **VOC and Particulate from Surface Coating Operations Associated with the Injection Presses**

**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Pit ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 12/27/2001**

## **LIMITED PTE**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (tons/yr)	PM Potential (ton/yr)	Transfer Efficiency
Adhesive	7.71	86.10%	0.00%	86.10%	3.38E-03	84.3	6.64	1.89	45.40	8.3	0.20	85%
Adhesive	7.71	86.10%	0.00%	86.10%	2.00E-03	84.3	6.64	1.12	26.86	4.9	0.12	85%
Adhesive	7.71	86.10%	0.00%	86.10%	1.54E-03	84.3	6.64	0.86	20.68	3.8	0.09	85%
Primer	7.46	82.10%	0.00%	82.10%	2.50E-03	84.3	6.12	1.29	30.98	5.7	0.18	85%
Primer	7.46	82.10%	0.00%	82.10%	2.00E-03	84.3	6.12	1.03	24.78	4.5	0.15	85%
Primer	7.46	82.10%	0.00%	82.10%	1.00E-03	84.3	6.12	0.52	12.39	2.3	0.07	85%

**State Potential Emissions**

**6.71      161.09      29.4      0.82**

## **PTE**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Gal of Mat. (gal/unit)**	Maximum (unit/hour)	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (tons/yr)	PM Potential (ton/yr)	Transfer Efficiency
Adhesive	7.71	86.10%	0.00%	86.10%	3.38E-03	246.1	6.64	5.52	132.52	24.2	0.59	85%
Adhesive	7.71	86.10%	0.00%	86.10%	2.00E-03	246.1	6.64	3.27	78.42	14.3	0.35	85%
Adhesive	7.71	86.10%	0.00%	86.10%	1.54E-03	246.1	6.64	2.52	60.38	11.0	0.27	85%
Primer	7.46	82.10%	0.00%	82.10%	2.50E-03	246.1	6.12	3.77	90.44	16.5	0.54	85%
Primer	7.46	82.10%	0.00%	82.10%	2.00E-03	246.1	6.12	3.01	72.35	13.2	0.43	85%
Primer	7.46	82.10%	0.00%	82.10%	1.00E-03	246.1	6.12	1.51	36.17	6.6	0.22	85%

**State Potential Emissions**

**19.60      470.28      85.8      2.39**

## **METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Sum of Coating Emissions + Sum of all Solvent Emissions

\*\*The gallon of material is as applied. The weight percent of the HAP is based on mix ratios as applied.

**Appendix A: Emission Calculations**

**HAP Emission Emissions from Surface Coating Operations Associated with the Injection Presses**

**Company Name:** Cooper Tire & Rubber Company  
**Address City IN Zip:** 207 South West Street Auburn 46706  
**Permit No. :** 033 - 14752  
**Plt ID:** 033 - 00013  
**Reviewer:** ERG/AB  
**Date:** 12/27/2001

**LIMITED PTE**

Material	Density (lb/gal)	Gallons of Material** (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylbenzene	Weight % MIBK	Weight % Phenol	Weight % Toluene	Weight % Formaldehyde	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Phenol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
Primer	7.46	3.38E-03	84.3	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.35	0.09	7.22	0.08	0.01	0.01
Primer	7.46	2.00E-03	84.3	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.21	0.05	4.27	0.05	0.01	0.00
Primer	7.46	1.54E-03	84.3	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.16	0.04	3.29	0.04	0.01	0.00
Adhesive	7.71	2.53E-03	84.3	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.76	0.31	0.00	0.00	5.25	0.00
Adhesive	7.71	2.0E-03	84.3	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.60	0.24	0.00	0.00	4.15	0.00
Adhesive	7.71	1.00E-03	84.3	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.30	0.12	0.00	0.00	2.08	0.00

**Total State Potential Emissions**

2.39      0.86      14.79      0.17      11.50      0.01

Total HAPs =      29.7 tons/yr

**PTE**

Material	Density (lb/gal)	Gallons of Material** (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylbenzene	Weight % MIBK	Weight % Phenol	Weight % Toluene	Weight % Formaldehyde	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Phenol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
Primer	7.46	3.38E-03	246.1	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	1.03	0.27	21.09	0.25	0.04	0.02
Primer	7.46	2.00E-03	246.1	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.61	0.16	12.48	0.15	0.02	0.01
Primer	7.46	1.54E-03	246.1	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.47	0.12	9.61	0.11	0.02	0.01
Adhesive	7.71	2.53E-03	246.1	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	2.23	0.90	0.00	0.00	15.33	0.00
Adhesive	7.71	2.0E-03	246.1	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	1.76	0.71	0.00	0.00	12.12	0.00
Adhesive	7.71	1.00E-03	246.1	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.88	0.36	0.00	0.00	6.06	0.00

**Total State Potential Emissions**

6.97      2.52      43.18      0.51      33.58      0.04

Total HAPs =      86.8 tons/yr

**METHODOLOGY**

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

\*\*The gallon of material is as applied. The weight percent of the HAP is based on mix ratios as applied.

**Appendix A: Emissions Calculations**  
**VOC, HAP and Particulate from Rubber Producing Operations**  
**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Pit ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 09/18/2001**

Page 3 of 12 TSD AppA

## Mixing Emission Factor Summary

Limited Rubber Throughput (lbs/year): **1,584,000**  
Maximum Rubber Throughput (lbs/year): **4,625,280**

Analyte Name	CAS #	Max lb/lb rubber	Limited PTE Emissions lbs/year	Limited PTE Emissions tons/yr	PTE Emissions tons/yr
<b>Total VOC</b>		0.00044445	704	0.35	1.03
<b>Total Speciated Organics</b>		0.00029878	473	0.24	0.69
<b>Total Particulate Matter</b>		0.000925	1465	0.73	2.14
<b>Total Organic HAPs</b>		0.00014041	222	0.11	0.32
<b>Total Metal HAPs</b>		1.739E-07	0	0.00	0.00
<b>Total HAPs</b>		0.00014048	223	0.11	0.32
1,1,1-Trichloroethane	71-55-6	0.00000073	1.2		5.8E-04
1,1,2,2-Tetrachloroethane	79-34-5	0.00000000	0.0		0.0E+00
1,1,2-Trichloroethane	79-00-5	0.00000000	0.0		0.0E+00
1,1-Dichloroethane	75-34-3	0.00000000	0.0		0.0E+00
1,1-Dichloroethene	75-35-4	0.00000055	0.9		4.3E-04
1,2,4-Trichlorobenzene	120-82-1	0.00000000	0.0		0.0E+00
1,2-Dibromo-3-Chloropropane	96-12-8	0.00000000	0.0		0.0E+00
1,2-Dibromoethane	106-93-4	0.00000000	0.0		0.0E+00
1,2-Dichloroethane	107-06-2	0.00000000	0.0		0.0E+00
1,2-Dichloropropane	78-87-5	0.00000000	0.0		0.0E+00
1,2-Epoxybutane	106-88-7		0.0		0.0E+00
1,3-Butadiene	106-99-0	0.00000047	0.7		3.7E-04
1,4-Dibromobenzene	106-37-6	0.00000000	0.0		3.5E-06
1,4-Dichlorobenzene	106-46-7	0.00000000	0.0		0.0E+00
1,4-Dioxane	123-91-1	0.00000000	0.0		0.0E+00
1,4-Phenylenediamine	106-50-3	0.00000000	0.0		0.0E+00
2,4,5-Trichlorophenol	95-95-4	0.00000000	0.0		0.0E+00
2,4,6-Trichlorophenol	88-06-2	0.00000000	0.0		0.0E+00
2,4-Dinitrophenol	51-28-5	0.00000002	0.0		1.3E-05
2,4-Dinitrotoluene	121-14-2	0.00000000	0.0		0.0E+00
2-Butanone	78-93-3	0.00000591	9.4		4.7E-03
2-Chloro-1,3-Butadiene	126-99-8		0.0		0.0E+00
2-Chloroacetophenone	532-27-4	0.00000000	0.0		4.3E-07
2-Methylphenol	95-48-7	0.00000009	0.1		6.8E-05
3,3'-Dichlorobenzidine	91-94-1	0.00000000	0.0		0.0E+00
3,3'-Dimethoxybenzidine	119-90-4	0.00000000	0.0		0.0E+00
3,3'-Dimethylbenzidine	119-93-7	0.00000000	0.0		0.0E+00
4,4'-Methylenedianiline	101-77-9	0.00000000	0.0		0.0E+00
4-Aminobiphenyl	92-67-1	0.00000000	0.0		0.0E+00
4-Methyl-2-Pentanone	108-10-1	0.00003063	48.5		2.4E-02
4-Nitrobiphenyl	92-93-3	0.00000000	0.0		0.0E+00
4-Nitrophenol	100-02-7	0.00000001	0.0		7.8E-06
a,a,a-Trichlorotoluene	98-07-7	0.00000000	0.0		0.0E+00
Acetaldehyde	75-07-0	0.00000070	1.1		5.5E-04
Acetaldehyde + Isobutane		0.00000061	1.0		4.8E-04
Acetonitrile	75-05-8	0.00000046	0.7		3.7E-04
Acetophenone	98-86-2	0.00000232	3.7		1.8E-03
Acrolein	107-02-8	0.00000083	1.3		6.5E-04
Acrylonitrile	107-13-1	0.00001174	18.6		9.3E-03
Allyl Chloride	107-05-1	0.00000000	0.0		0.0E+00
Aniline	62-53-3	0.00000051	0.8		4.1E-04
Benzene	71-43-2	0.00000066	1.0		5.2E-04
Benzidine	92-87-5	0.00000002	0.0		1.4E-05
Benzyl Chloride	100-44-7	0.00000000	0.0		0.0E+00
Biphenyl	92-52-4	0.00000006	0.1		4.5E-05
bis(2-Chloroethyl)ether	111-44-4	0.00000000	0.0		0.0E+00
bis(2-Ethylhexyl)phthalate	117-81-7	0.00000074	1.2		5.9E-04
Bromoform	75-25-2	0.00000028	0.4		2.2E-04
Bromomethane	74-83-9	0.00000006	0.1		4.5E-05
Cadmium (Cd) Compounds		0.00000001	0.0		7.4E-06
Carbon Disulfide	75-15-0	0.00010251	162.4		8.1E-02
Carbon Tetrachloride	56-23-5	0.00004680	74.1		3.7E-02
Carbonyl Sulfide	463-58-1	0.00002244	35.5		1.8E-02
Chlorobenzene	108-90-7	0.00000000	0.0		0.0E+00
Chloroethane	75-00-3	0.00000170	2.7		1.3E-03
Chloroform	67-66-3	0.00000065	1.0		5.2E-04

**Appendix A: Emissions Calculations**  
**VOC, HAP and Particulate from Rubber Producing Operations**  
**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street**  
**Permit No.: 033 - 14752**  
**Plt ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 09/18/2001**

Page 4 of 12 TSD AppA

## Mixing Emission Factor Summary

Limited Rubber Throughput (lbs/year): **1,584,000**  
Maximum Rubber Throughput (lbs/year): **4,625,280**

Analyte Name	CAS #	Max lb/lb rubber	Limited PTE Emissions lbs/year	Limited PTE Emissions tons/yr	PTE Emissions tons/yr
Chloromethane	74-87-3	8.864E-07	1.4		7.0E-04
Chromium (Cr) Compounds		1.227E-07	0.2		9.7E-05
Cobalt (Co) Compounds			0.0		0.0E+00
Cumene	98-82-8	3.173E-06	5.0		2.5E-03
Di-n-butylphthalate	84-74-2	3.338E-07	0.5		2.6E-04
Dibenzofuran	132-64-9	3.417E-08	0.1		2.7E-05
Dimethylaminoazobenzene	60-11-7	1.637E-08	0.0		1.3E-05
Dimethylphthalate	131-11-3	1.573E-08	0.0		1.2E-05
Epichlorohydrin	106-89-8	0	0.0		0.0E+00
Ethyl Acrylate	140-88-5	4.727E-06	7.5		3.7E-03
Ethylbenzene	100-41-4	4.324E-06	6.8		3.4E-03
Hexachlorobenzene	118-74-1	9.294E-09	0.0		7.4E-06
Hexachlorobutadiene	87-68-3	0	0.0		0.0E+00
Hexachlorocyclopentadiene	77-47-4	0	0.0		0.0E+00
Hexachloroethane	67-72-1	1.232E-06	2.0		9.8E-04
Hexane	110-54-3	0.00011291	178.8		8.9E-02
Hydroquinone	123-31-9	0.00002625	41.6		2.1E-02
Iodomethane	74-88-4		0.0		0.0E+00
Isooctane	540-84-1	7.946E-07	1.3		6.3E-04
Isophorone	78-59-1	6.632E-07	1.1		5.3E-04
Lead (Pb) Compounds		2.027E-08	0.0		1.6E-05
m-Xylene	108-38-3		0.0		0.0E+00
m-Xylene + p-Xylene		0.00001441	22.8		1.1E-02
Methyl Methacrylate	80-62-6		0.0		0.0E+00
Methylene bis-chloroaniline	101-14-4	0	0.0		0.0E+00
Methylene Chloride	75-09-2	0.00003862	61.2		3.1E-02
N,N-Dimethylaniline	121-69-7	0	0.0		0.0E+00
N-Nitrosodimethylamine	62-75-9	0	0.0		0.0E+00
N-Nitrosodiphenylamine	86-30-6	2.339E-09	0.0		1.9E-06
N-Nitrosomorpholine	59-89-2	0	0.0		0.0E+00
Naphthalene	91-20-3	3.083E-07	0.5		2.4E-04
Nickel (Ni) Compounds		9.527E-08	0.2		7.5E-05
Nitrobenzene	98-95-3	2.018E-08	0.0		1.6E-05
o-Anisidine	90-04-0	0	0.0		0.0E+00
o-Toluidine	95-53-4	2.232E-07	0.4		1.8E-04
o-Xylene	95-47-6	7.730E-06	12.2		6.1E-03
p-Xylene	106-42-3		0.0		0.0E+00
Pentachloronitrobenzene	82-68-8	0	0.0		0.0E+00
Pentachlorophenol	87-86-5	1.251E-08	0.0		9.9E-06
Phenol	108-95-2	1.269E-06	2.0		1.0E-03
Propanal	123-38-6	3.327E-06	5.3		2.6E-03
Propylene Oxide	75-56-9	6.965E-06	11.0		5.5E-03
Styrene	100-42-5	4.251E-06	6.7		3.4E-03
Substituted Quinoline	91-22-5		0.0		0.0E+00
t-Butyl Methyl Ether	1634-04-4	7.983E-06	12.6		6.3E-03
Tetrachloroethene	127-18-4	4.099E-06	6.5		3.2E-03
Toluene	108-88-3	0.00002305	36.5		1.8E-02
Trichloroethene	79-01-6	2.218E-07	0.4		1.8E-04
Trifluralin	1582-09-8	0	0.0		0.0E+00
Vinyl Acetate	108-05-4	2.346E-06	3.7		1.9E-03
Vinyl Bromide	593-60-2		0.0		0.0E+00
Vinyl Chloride	75-01-4	1.316E-08	0.0		1.0E-05

Limited production rate keeps VOC emissions below the PSD significance level of 40tpy

**Appendix A: Emissions Calculations**  
**VOC, HAP and Particulate from Rubber Producing Operations**  
**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Plt ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 09/18/2001**

Page 5 of 12 TSD AppA

**Platen Curing Emission Factor Summary**

Limited Rubber Throughput (lbs/year): 1,584,000  
Maximum Rubber Throughput (lbs/year): 4,625,280

Analyte Name	CAS #	Max lb/lb rubber	Limited Emissions lbs/year	Limited Emissions Tons/year	Maximum Emissions Tons/year
<b>Total VOC</b>		6.68E-03	10,586.2	5.29	15.46
<b>Total Speciated Organics</b>		3.29E-03	5,217.9	2.61	7.62
<b>Total Particulate Matter</b>			0.0	0.00	0.00
<b>Total Organic HAPs</b>		1.36E-03	2,155.1	1.08	3.15
<b>Total Metal HAPs</b>			0.0	0.00	0.00
<b>Total HAPs</b>		1.36E-03	2,155.1	1.08	3.15
1,1,1-Trichloroethane	71-55-6	3.56E-04	564.3		2.8E-01
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00	0.0		0.0E+00
1,1,2-Trichloroethane	79-00-5	0.00E+00	0.0		0.0E+00
1,1-Dichloroethane	75-34-3	0.00E+00	0.0		0.0E+00
1,1-Dichloroethene	75-35-4	1.07E-05	16.9		8.5E-03
1,2,4-Trichlorobenzene	120-82-1	1.66E-08	0.0		1.3E-05
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00	0.0		0.0E+00
1,2-Dibromoethane	106-93-4	0.00E+00	0.0		0.0E+00
1,2-Dichloroethane	107-06-2	0.00E+00	0.0		0.0E+00
1,2-Dichloropropane	78-87-5	0.00E+00	0.0		0.0E+00
1,2-Epoxybutane	106-88-7		0.0		0.0E+00
1,3-Butadiene	106-99-0	2.56E-05	40.6		2.0E-02
1,4-Dibromobenzene	106-37-6		0.0		0.0E+00
1,4-Dichlorobenzene	106-46-7	1.03E-07	0.2		8.2E-05
1,4-Dioxane	123-91-1	0.00E+00	0.0		0.0E+00
1,4-Phenylenediamine	106-50-3	0.00E+00	0.0		0.0E+00
2,4,5-Trichlorophenol	95-95-4	0.00E+00	0.0		0.0E+00
2,4,6-Trichlorophenol	88-06-2	0.00E+00	0.0		0.0E+00
2,4-Dinitrophenol	51-28-5	0.00E+00	0.0		0.0E+00
2,4-Dinitrotoluene	121-14-2	0.00E+00	0.0		0.0E+00
2-Butanone	78-93-3	5.35E-05	84.7		4.2E-02
2-Chloro-1,3-Butadiene	126-99-8	9.08E-06	14.4		7.2E-03
2-Chloroacetophenone	532-27-4	0.00E+00	0.0		0.0E+00
2-Methylphenol	95-48-7	1.17E-07	0.2		9.3E-05
3,3'-Dichlorobenzidine	91-94-1	0.00E+00	0.0		0.0E+00
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00	0.0		0.0E+00
3,3'-Dimethylbenzidine	119-93-7	0.00E+00	0.0		0.0E+00
4,4'-Methylenedianiline	101-77-9	0.00E+00	0.0		0.0E+00
4-Aminobiphenyl	92-67-1	0.00E+00	0.0		0.0E+00
4-Methyl-2-Pentanone	108-10-1	5.99E-04	948.5		4.7E-01
4-Nitrobiphenyl	92-93-3	0.00E+00	0.0		0.0E+00
4-Nitrophenol	100-02-7	0.00E+00	0.0		0.0E+00
a,a,a-Trichlorotoluene	98-07-7	0.00E+00	0.0		0.0E+00
Acetaldehyde	75-07-0	1.00E-05	15.8		7.9E-03
Acetaldehyde + Isobutane			0.0		0.0E+00
Acetonitrile	75-05-8	5.47E-06	8.7		4.3E-03
Acetophenone	98-86-2	4.39E-04	696.2		3.5E-01
Acrolein	107-02-8	4.44E-06	7.0		3.5E-03
Acrylonitrile	107-13-1	3.02E-05	47.8		2.4E-02
Allyl Chloride	107-05-1	0.00E+00	0.0		0.0E+00
Aniline	62-53-3	1.02E-03	1,608.1		8.0E-01
Benzene	71-43-2	5.62E-06	8.9		4.4E-03
Benzidine	92-87-5	4.53E-06	7.2		3.6E-03
Benzyl Chloride	100-44-7	0.00E+00	0.0		0.0E+00
Biphenyl	92-52-4	3.06E-07	0.5		2.4E-04
bis(2-Chloroethyl)ether	111-44-4	0.00E+00	0.0		0.0E+00
bis(2-Ethylhexyl)phthalate	117-81-7	1.78E-05	28.2		1.4E-02
Bromoform	75-25-2	0.00E+00	0.0		0.0E+00
Bromomethane	74-83-9	0.00E+00	0.0		0.0E+00
Cadmium (Cd) Compounds			0.0		0.0E+00
Carbon Disulfide	75-15-0	1.32E-03	2,093.4		1.0E+00
Carbon Tetrachloride	56-23-5	9.15E-04	1,449.1		7.2E-01
Carbonyl Sulfide	463-58-1	4.39E-04	694.8		3.5E-01
Chlorobenzene	108-90-7	0.00E+00	0.0		0.0E+00

**Appendix A: Emissions Calculations**  
**VOC, HAP and Particulate from Rubber Producing Operations**  
**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Plt ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 09/18/2001**

Page 6 of 12 TSD AppA

**Platen Curing Emission Factor Summary**

**Limited Rubber Throughput (lbs/year):** 1,584,000  
**Maximum Rubber Throughput (lbs/year):** 4,625,280

Analyte Name	CAS #	Max lb/lb rubber	Limited Emissions lbs/year	Limited Emissions Tons/year	Maximum Emissions Tons/year
Chloroethane	75-00-3	1.48E-06	2.3		1.2E-03
Chloroform	67-66-3	1.27E-05	20.2		1.0E-02
Chloromethane	74-87-3	7.68E-06	12.2		6.1E-03
Chromium (Cr) Compounds			0.0		0.0E+00
Cobalt (Co) Compounds			0.0		0.0E+00
Cumene	98-82-8	2.76E-06	4.4		2.2E-03
Di-n-butylphthalate	84-74-2	9.64E-06	15.3		7.6E-03
Dibenzofuran	132-64-9	1.54E-07	0.2		1.2E-04
Dimethylaminoazobenzene	60-11-7	3.20E-07	0.5		2.5E-04
Dimethylphthalate	131-11-3	1.80E-07	0.3		1.4E-04
Epichlorohydrin	106-89-8	0.00E+00	0.0		0.0E+00
Ethyl Acrylate	140-88-5		0.0		0.0E+00
Ethylbenzene	100-41-4	5.43E-06	8.6		4.3E-03
Hexachlorobenzene	118-74-1	0.00E+00	0.0		0.0E+00
Hexachlorobutadiene	87-68-3	3.93E-07	0.6		3.1E-04
Hexachlorocyclopentadiene	77-47-4	0.00E+00	0.0		0.0E+00
Hexachloroethane	67-72-1	2.41E-05	38.1		1.9E-02
Hexane	110-54-3	3.00E-04	474.5		2.4E-01
Hydroquinone	123-31-9	1.58E-05	25.1		1.3E-02
Iodomethane	74-88-4		0.0		0.0E+00
Isooctane	540-84-1	4.81E-06	7.6		3.8E-03
Isophorone	78-59-1	1.16E-06	1.8		9.2E-04
Lead (Pb) Compounds			0.0		0.0E+00
m-Xylene	108-38-3		0.0		0.0E+00
m-Xylene + p-Xylene		1.73E-05	27.3		1.4E-02
Methyl Methacrylate	80-62-6		0.0		0.0E+00
Methylene bis-chloroaniline	101-14-4	0.00E+00	0.0		0.0E+00
Methylene Chloride	75-09-2	4.87E-05	77.1		3.9E-02
N,N-Dimethylaniline	121-69-7	0.00E+00	0.0		0.0E+00
N-Nitrosodimethylamine	62-75-9	0.00E+00	0.0		0.0E+00
N-Nitrosodiphenylamine	86-30-6		0.0		0.0E+00
N-Nitrosomorpholine	59-89-2	0.00E+00	0.0		0.0E+00
Naphthalene	91-20-3	4.04E-06	6.4		3.2E-03
Nickel (Ni) Compounds			0.0		0.0E+00
Nitrobenzene	98-95-3	0.00E+00	0.0		0.0E+00
o-Anisidine	90-04-0	0.00E+00	0.0		0.0E+00
o-Toluidine	95-53-4	4.36E-06	6.9		3.5E-03
o-Xylene	95-47-6	1.86E-05	29.5		1.5E-02
p-Xylene	106-42-3		0.0		0.0E+00
Pentachloronitrobenzene	82-68-8	0.00E+00	0.0		0.0E+00
Pentachlorophenol	87-86-5	0.00E+00	0.0		0.0E+00
Phenol	108-95-2	2.67E-06	4.2		2.1E-03
Propanal	123-38-6		0.0		0.0E+00
Propylene Oxide	75-56-9	1.04E-04	164.5		8.2E-02
Styrene	100-42-5	8.31E-05	131.6		6.6E-02
Substituted Quinoline	91-22-5		0.0		0.0E+00
t-Butyl Methyl Ether	1634-04-4	1.56E-04	247.2		1.2E-01
Tetrachloroethene	127-18-4	1.36E-05	21.5		1.1E-02
Toluene	108-88-3	3.96E-05	62.8		3.1E-02
Trichloroethene	79-01-6	0.00E+00	0.0		0.0E+00
Trifluralin	1582-09-8	0.00E+00	0.0		0.0E+00
Vinyl Acetate	108-05-4	0.00E+00	0.0		0.0E+00
Vinyl Bromide	593-60-2		0.0		0.0E+00
Vinyl Chloride	75-01-4	2.57E-07	0.4		2.0E-04

Limited production rate keeps VOC emissions below the PSD significance level of 40tpy

**Appendix A: Emissions Calculations**  
**VOC, HAP and Particulate from Rubber Producing Operations**  
**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Pit ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 09/18/2001**

**Extruding Emission Factor Summary**

**Current Rubber Throughput (lbs/year):** 12,253,421  
**Maximum Rubber Throughput (lbs/year):** 13,423,882

Analyte Name	CAS #	Max lb/lb rubber	Current Emissions lbs/year	Current Emissions tons/yr	Future Potential Emissions tons/yr
<b>Total VOC</b>		1.06E-04	1,304	0.65	0.71
<b>Total Speciated Organics</b>		1.60E-04	1,962	0.98	1.07
<b>Total Particulate Matter</b>		1.12E-07	1	0.00	0.00
<b>Total Organic HAPs</b>		7.52E-05	922	0.46	0.50
<b>Total Metal HAPs</b>		7.55E-07	9	0.00	0.01
<b>Total HAPs</b>		7.52E-05	922	0.46	0.50
1,1,1-Trichloroethane	71-55-6	3.92E-07	4.8		
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00	0.0		
1,1,2-Trichloroethane	79-00-5	0.00E+00	0.0		
1,1-Dichloroethane	75-34-3	0.00E+00	0.0		
1,1-Dichloroethene	75-35-4	1.17E-07	1.4		
1,2,4-Trichlorobenzene	120-82-1	0.00E+00	0.0		
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00	0.0		
1,2-Dibromoethane	106-93-4	0.00E+00	0.0		
1,2-Dichloroethane	107-06-2	0.00E+00	0.0		
1,2-Dichloropropane	78-87-5	0.00E+00	0.0		
1,2-Epoxybutane	106-88-7		0.0		
1,3-Butadiene	106-99-0	5.06E-07	6.2		
1,4-Dibromobenzene	106-37-6	2.40E-09	0.0		
1,4-Dichlorobenzene	106-46-7	8.36E-09	0.1		
1,4-Dioxane	123-91-1	1.67E-07	2.0		
1,4-Phenylenediamine	106-50-3	0.00E+00	0.0		
2,4,5-Trichlorophenol	95-95-4	0.00E+00	0.0		
2,4,6-Trichlorophenol	88-06-2	0.00E+00	0.0		
2,4-Dinitrophenol	51-28-5	8.67E-09	0.1		
2,4-Dinitrotoluene	121-14-2	0.00E+00	0.0		
2-Butanone	78-93-3	3.17E-06	38.8		
2-Chloro-1,3-Butadiene	126-99-8		0.0		
2-Chloroacetophenone	532-27-4	6.48E-09	0.1		
2-Methylphenol	95-48-7	4.63E-08	0.6		
3,3'-Dichlorobenzidine	91-94-1	0.00E+00	0.0		
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00	0.0		
3,3'-Dimethylbenzidine	119-93-7	0.00E+00	0.0		
4,4'-Methylenedianiline	101-77-9	0.00E+00	0.0		
4-Aminobiphenyl	92-67-1	0.00E+00	0.0		
4-Methyl-2-Pentanone	108-10-1	6.73E-06	82.4		
4-Nitrobiphenyl	92-93-3	0.00E+00	0.0		
4-Nitrophenol	100-02-7	5.30E-09	0.1		
a,a,a-Trichlorotoluene	98-07-7	0.00E+00	0.0		
Acetaldehyde	75-07-0	3.73E-07	4.6		
Acetaldehyde + Isobutane		3.28E-07	4.0		
Acetonitrile	75-05-8	2.48E-07	3.0		
Acetophenone	98-86-2	8.18E-06	100.2		
Acrolein	107-02-8	4.42E-07	5.4		
Acrylonitrile	107-13-1	6.29E-06	77.1		
Allyl Chloride	107-05-1	0.00E+00	0.0		
Aniline	62-53-3	5.08E-07	6.2		
Benzene	71-43-2	3.54E-07	4.3		
Benzidine	92-87-5	1.26E-08	0.2		
Benzyl Chloride	100-44-7	0.00E+00	0.0		
Biphenyl	92-52-4	3.02E-08	0.4		
bis(2-Chloroethyl)ether	111-44-4	0.00E+00	0.0		
bis(2-Ethylhexyl)phthalate	117-81-7	3.96E-07	4.9		
Bromoform	75-25-2	1.49E-07	1.8		
Bromomethane	74-83-9	3.01E-08	0.4		
Cadmium (Cd) Compounds			0.0		
Carbon Disulfide	75-15-0	2.43E-08	0.3		
Carbon Tetrachloride	56-23-5	5.49E-05	673.1		
Carbonyl Sulfide	463-58-1	2.51E-05	307.3		
Chlorobenzene	108-90-7	1.20E-05	147.3		
Chloroethane	75-00-3	0.00E+00	0.0		



**Appendix A: Emissions Calculations**  
**VOC, HAP and Particulate from Rubber Producing Operations**  
**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Pit ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 09/18/2001**

**Extruding Emission Factor Summary**

**Limited Rubber Throughput (lbs/year):** 1,584,000

**Maximum Rubber Throughput (lbs/year):** 4,625,280

Analyte Name	CAS #	Max lb/lb rubber	Current Emissions lbs/year	Current Emissions tons/yr	Max Emissions tons/yr
Chloroform	67-66-3	3.49E-07	4.3		
Chloromethane	74-87-3	4.75E-07	5.8		
Chromium (Cr) Compounds		2.54E-07	3.1		
Cobalt (Co) Compounds		1.90E-08	0.2		
Cumene	98-82-8	1.82E-06	22.3		
Di-n-butylphthalate	84-74-2	3.65E-07	4.5		
Dibenzofuran	132-64-9	1.83E-08	0.2		
Dimethylaminoazobenzene	60-11-7	8.77E-09	0.1		
Dimethylphthalate	131-11-3	8.43E-09	0.1		
Epichlorohydrin	106-89-8	0.00E+00	0.0		
Ethyl Acrylate	140-88-5	2.53E-06	31.0		
Ethylbenzene	100-41-4	2.32E-06	28.4		
Hexachlorobenzene	118-74-1	4.98E-09	0.1		
Hexachlorobutadiene	87-68-3	1.72E-07	2.1		
Hexachlorocyclopentadiene	77-47-4	0.00E+00	0.0		
Hexachloroethane	67-72-1	6.60E-07	8.1		
Hexane	110-54-3	6.05E-05	741.3		
Hydroquinone	123-31-9	1.41E-05	172.3		
Iodomethane	74-88-4		0.0		
Isooctane	540-84-1	4.12E-07	5.1		
Isophorone	78-59-1	3.55E-07	4.4		
Lead (Pb) Compounds			0.0		
m-Xylene	108-38-3		0.0		
m-Xylene + p-Xylene		7.72E-06	94.6		
Methyl Methacrylate	80-62-6		0.0		
Methylene bis-chloroaniline	101-14-4	0.00E+00	0.0		
Methylene Chloride	75-09-2	2.07E-05	253.6		
N,N-Dimethylaniline	121-69-7	5.45E-09	0.1		
N-Nitrosodimethylamine	62-75-9	0.00E+00	0.0		
N-Nitrosodiphenylamine	86-30-6	1.25E-09	0.0		
N-Nitrosomorpholine	59-89-2	0.00E+00	0.0		
Naphthalene	91-20-3	1.96E-06	24.0		
Nickel (Ni) Compounds		4.91E-07	6.0		
Nitrobenzene	98-95-3	1.08E-08	0.1		
o-Anisidine	90-04-0	0.00E+00	0.0		
o-Toluidine	95-53-4	1.50E-07	1.8		
o-Xylene	95-47-6	4.14E-06	50.8		
p-Xylene	106-42-3		0.0		
Pentachloronitrobenzene	82-68-8	0.00E+00	0.0		
Pentachlorophenol	87-86-5	6.70E-09	0.1		
Phenol	108-95-2	6.80E-07	8.3		
Propanal	123-38-6	1.78E-06	21.8		
Propylene Oxide	75-56-9	3.73E-06	45.7		
Styrene	100-42-5	7.25E-07	8.9		
Substituted Quinoline	91-22-5		0.0		
t-Butyl Methyl Ether	1634-04-4	4.28E-06	52.4		
Tetrachloroethene	127-18-4	2.20E-06	26.9		
Toluene	108-88-3	1.24E-05	151.3		
Trichloroethene	79-01-6	3.30E-07	4.0		
Trifluralin	1582-09-8	0.00E+00	0.0		
Vinyl Acetate	108-05-4	1.26E-06	15.4		
Vinyl Bromide	593-60-2		0.0		
Vinyl Chloride	75-01-4	3.26E-08	0.4		

\* Current emissions based on 1999 and 2000 production data.

Appendix A: Emissions Calculations

Emissions from Grinding and Finishing Operations

Company Name: Cooper Tire & Rubber Company  
Address City IN Zip: 207 South West Street Auburn 46706  
Permit No.: 033 - 14752  
Pit ID: 033 - 00013  
Reviewer: ERG/AB  
Date: 01/07/2002

Limited Rubber Throughput (lbs/year): 15,840 \*  
Maximum Rubber Throughput (lbs/year): 46,253 \*

Analyte Name	CAS #	Max lb/lb rubber	Max Emissions lbs/year	Max Emissions tons/year	Limited Emissions lbs/year	Limited Emissions tons/year
Total VOC		1.78E-03	82	0.041	28	0.014
Total Speciated Organics		2.66E-03	123	0.062	42	0.021
Total Particulate Matter		2.26E-04	10	0.005	4	0.002
Total Organic HAPs		2.15E-03	100	0.050	34	0.017
Total Metal HAPs		1.34E-05	1	0.000	0	0.000
Total HAPs		2.17E-03	100	0.050	34	0.017
1,1,1-Trichloroethane	71-55-6	0.00E+00	0	0.000	0	0.000
1,1,2,2-Tetrachloroethane	79-34-5	0.00E+00	0	0.000	0	0.000
1,1,2-Trichloroethane	79-00-5	0.00E+00	0	0.000	0	0.000
1,1-Dichloroethane	75-34-3	0.00E+00	0	0.000	0	0.000
1,1-Dichloroethene	75-35-4	0.00E+00	0	0.000	0	0.000
1,2,4-Trichlorobenzene	120-82-1	0.00E+00	0	0.000	0	0.000
1,2-Dibromo-3-Chloropropane	96-12-8	0.00E+00	0	0.000	0	0.000
1,2-Dibromoethane	106-93-4	0.00E+00	0	0.000	0	0.000
1,2-Dichloroethane	107-06-2	0.00E+00	0	0.000	0	0.000
1,2-Dichloropropane	78-87-5	0.00E+00	0	0.000	0	0.000
1,2-Epoxybutane	106-88-7	0.00E+00	0	0.000	0	0.000
1,3-Butadiene	106-99-0	2.41E-05	1	0.001	0	0.000
1,4-Dibromobenzene	106-37-6	0.00E+00	0	0.000	0	0.000
1,4-Dichlorobenzene	106-46-7	0.00E+00	0	0.000	0	0.000
1,4-Dioxane	123-91-1	0.00E+00	0	0.000	0	0.000
1,4-Phenylenediamine	106-50-3	0.00E+00	0	0.000	0	0.000
2,4,5-Trichlorophenol	95-95-4	0.00E+00	0	0.000	0	0.000
2,4,6-Trichlorophenol	88-06-2	0.00E+00	0	0.000	0	0.000
2,4-Dinitrophenol	51-28-5	0.00E+00	0	0.000	0	0.000
2,4-Dinitrotoluene	121-14-2	0.00E+00	0	0.000	0	0.000
2-Butanone	78-93-3	6.22E-06	0	0.000	0	0.000
2-Chloro-1,3-Butadiene	126-99-8	8.16E-05	4	0.002	1	0.001
2-Chloroacetophenone	532-27-4	0.00E+00	0	0.000	0	0.000
2-Methylphenol	95-48-7	0.00E+00	0	0.000	0	0.000
3,3'-Dichlorobenzidine	91-94-1	0.00E+00	0	0.000	0	0.000
3,3'-Dimethoxybenzidine	119-90-4	0.00E+00	0	0.000	0	0.000
3,3'-Dimethylbenzidine	119-93-7	0.00E+00	0	0.000	0	0.000
4,4'-Methylenedianiline	101-77-9	0.00E+00	0	0.000	0	0.000
4-Aminobiphenyl	92-67-1	0.00E+00	0	0.000	0	0.000
4-Methyl-2-Pentanone	108-10-1	0.00E+00	0	0.000	0	0.000
4-Nitrobiphenyl	92-93-3	3.80E-07	0	0.000	0	0.000
4-Nitrophenol	100-02-7	0.00E+00	0	0.000	0	0.000
a,a,a-Trichlorotoluene	98-07-7	0.00E+00	0	0.000	0	0.000
Acetaldehyde	75-07-0	1.53E-05	1	0.000	0	0.000
Acetaldehyde + Isobutane			0	0.000	0	0.000
Acetonitrile	75-05-8	0.00E+00	0	0.000	0	0.000
Acetophenone	98-86-2	1.77E-05	1	0.000	0	0.000
Acrolein	107-02-8	6.44E-06	0	0.000	0	0.000
Acrylonitrile	107-13-1	0.00E+00	0	0.000	0	0.000
Allyl Chloride	107-05-1	0.00E+00	0	0.000	0	0.000
Aniline	62-53-3	0.00E+00	0	0.000	0	0.000
Benzene	71-43-2	0.00E+00	0	0.000	0	0.000
Benzidine	92-87-5	0.00E+00	0	0.000	0	0.000
Benzyl Chloride	100-44-7	0.00E+00	0	0.000	0	0.000
Biphenyl	92-52-4	0.00E+00	0	0.000	0	0.000
bis(2-Chloroethyl)ether	111-44-4	0.00E+00	0	0.000	0	0.000
bis(2-Ethylhexyl)phthalate	117-81-7	5.30E-05	2	0.001	1	0.000
Bromoform	75-25-2	0.00E+00	0	0.000	0	0.000
Bromomethane	74-83-9	0.00E+00	0	0.000	0	0.000
Cadmium (Cd) Compounds		1.40E-07	0	0.000	0	0.000
Carbon Disulfide	75-15-0	3.03E-04	14	0.007	5	0.002
Carbon Tetrachloride	56-23-5	0.00E+00	0	0.000	0	0.000
Carbonyl Sulfide	463-58-1	7.14E-06	0	0.000	0	0.000
Chlorobenzene	108-90-7	0.00E+00	0	0.000	0	0.000
Chloroethane	75-00-3	0.00E+00	0	0.000	0	0.000

\*Grinding Throughput is assumed to be 1% of total rubber cured.

## Appendix A: Emissions Calculations

Page 10 of 12 TSD App A

## Emissions from Grinding and Finishing Operations

Company Name: Cooper Tire &amp; Rubber Company

Address City IN Zip: 207 South West Street Auburn 46706

Permit No.: 033 - 14752

Plt ID: 033 - 00013

Reviewer: ERG/AB

Date: 01/07/2002

Limited Rubber Throughput (lbs/year): 15,840 \*

Maximum Rubber Throughput (lbs/year): 46,253 \*

Analyte Name	CAS #	Max lb/lb rubber	Max Emissions lbs/year	Max Emissions tons/year	Limited Emissions lbs/year	Limited Emissions tons/year
Chloroform	67-66-3	0.00E+00	0	0.000	0	0.000
Chloromethane	74-87-3	0.00E+00	0	0.000	0	0.000
Chromium (Cr) Compounds		2.58E-06	0	0.000	0	0.000
Cobalt (Co) Compounds		0.00E+00	0	0.000	0	0.000
Cumene	98-82-8	0.00E+00	0	0.000	0	0.000
Di-n-butylphthalate	84-74-2	3.31E-06	0	0.000	0	0.000
Dibenzofuran	132-64-9	0.00E+00	0	0.000	0	0.000
Dimethylaminoazobenzene	60-11-7	0.00E+00	0	0.000	0	0.000
Dimethylphthalate	131-11-3	0.00E+00	0	0.000	0	0.000
Epichlorohydrin	106-89-8	0.00E+00	0	0.000	0	0.000
Ethyl Acrylate	140-88-5		0	0.000	0	0.000
Ethylbenzene	100-41-4	0.00E+00	0	0.000	0	0.000
Hexachlorobenzene	118-74-1	0.00E+00	0	0.000	0	0.000
Hexachlorobutadiene	87-68-3	0.00E+00	0	0.000	0	0.000
Hexachlorocyclopentadiene	77-47-4	0.00E+00	0	0.000	0	0.000
Hexachloroethane	67-72-1	0.00E+00	0	0.000	0	0.000
Hexane	110-54-3	4.18E-05	2	0.001	1	0.000
Hydroquinone	123-31-9	0.00E+00	0	0.000	0	0.000
Iodomethane	74-88-4		0	0.000	0	0.000
Isooctane	540-84-1	0.00E+00	0	0.000	0	0.000
Isophorone	78-59-1	0.00E+00	0	0.000	0	0.000
Lead (Pb) Compounds		1.59E-06	0	0.000	0	0.000
m-Xylene	108-38-3		0	0.000	0	0.000
m-Xylene + p-Xylene		8.51E-06	0	0.000	0	0.000
Methyl Methacrylate	80-62-6		0	0.000	0	0.000
Methylene bis-chloroaniline	101-14-4	0.00E+00	0	0.000	0	0.000
Methylene Chloride	75-09-2	4.98E-05	2	0.001	1	0.000
N,N-Dimethylaniline	121-69-7	0.00E+00	0	0.000	0	0.000
N-Nitrosodimethylamine	62-75-9	0.00E+00	0	0.000	0	0.000
N-Nitrosodiphenylamine	86-30-6		0	0.000	0	0.000
N-Nitrosomorpholine	59-89-2	0.00E+00	0	0.000	0	0.000
Naphthalene	91-20-3	4.02E-06	0	0.000	0	0.000
Nickel (Ni) Compounds		9.13E-06	0	0.000	0	0.000
Nitrobenzene	98-95-3	0.00E+00	0	0.000	0	0.000
o-Anisidine	90-04-0	0.00E+00	0	0.000	0	0.000
o-Toluidine	95-53-4	0.00E+00	0	0.000	0	0.000
o-Xylene	95-47-6	5.40E-06	0	0.000	0	0.000
p-Xylene	106-42-3		0	0.000	0	0.000
Pentachloronitrobenzene	82-68-8	0.00E+00	0	0.000	0	0.000
Pentachlorophenol	87-86-5	0.00E+00	0	0.000	0	0.000
Phenol	108-95-2	8.88E-06	0	0.000	0	0.000
Propanal	123-38-6		0	0.000	0	0.000
Propylene Oxide	75-56-9	3.06E-05	1	0.001	0	0.000
Styrene	100-42-5	0.00E+00	0	0.000	0	0.000
Substituted Quinoline	91-22-5		0	0.000	0	0.000
t-Butyl Methyl Ether	1634-04-4	0.00E+00	0	0.000	0	0.000
Tetrachloroethene	127-18-4	1.39E-04	6	0.003	2	0.001
Toluene	108-88-3	1.35E-03	62	0.031	21	0.011
Trichloroethene	79-01-6	0.00E+00	0	0.000	0	0.000
Trifluralin	1582-09-8	0.00E+00	0	0.000	0	0.000
Vinyl Acetate	108-05-4	0.00E+00	0	0.000	0	0.000
Vinyl Bromide	593-60-2		0	0.000	0	0.000
Vinyl Chloride	75-01-4	0.00E+00	0	0.000	0	0.000

\*Grinding Throughput is assumed to be 1% of total rubber cured.

**Appendix A: Emissions Calculations**  
**VOC and Particulate from Surface Coating Operations Associated with the Transfer Press**

**Company Name: Cooper Tire & Rubber Company**  
**Address City IN Zip: 207 South West Street Auburn 46706**  
**Permit No.: 033 - 14752**  
**Pit ID: 033 - 00013**  
**Reviewer: ERG/AB**  
**Date: 12/27/2001**

**LIMITED PTE**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (tons/yr)	PM Potential (ton/yr)	Transfer Efficiency
Adhesive	7.71	86.10%	0.00%	86.10%	5.00E-04	46.2	6.64	0.15	3.68	0.67	0.02	85%
Adhesive	7.71	86.10%	0.00%	86.10%	1.25E-03	46.2	6.64	0.38	9.20	1.68	0.04	85%
Adhesive	7.71	86.10%	0.00%	86.10%	9.60E-05	46.2	6.64	0.03	0.71	0.13	0.00	85%
Primer	7.46	82.10%	0.00%	82.10%	4.00E-04	46.2	6.12	0.11	2.72	0.50	0.02	85%
Primer	7.46	82.10%	0.00%	82.10%	9.1E-04	46.2	6.12	0.26	6.18	1.13	0.04	85%
Primer	7.46	82.10%	0.00%	82.10%	9.6E-05	46.2	6.12	0.03	0.65	0.12	0.00	85%

**State Potential Emissions**

**0.96                      23.14                      4.2                      0.12**

**PTE**

Material	Density (lb/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Gal of Mat. (gal/unit)**	Maximum (unit/hour)	Pounds VOC per gallon of coating	Potential VOC (lb/hr)	Potential VOC (lb/day)	Potential VOC (tons/yr)	PM Potential (ton/yr)	Transfer Efficiency
Adhesive	7.71	86.10%	0.00%	86.10%	5.00E-04	135	6.64	0.45	10.75	1.96	0.05	85%
Adhesive	7.71	86.10%	0.00%	86.10%	1.25E-03	135	6.64	1.12	26.89	4.91	0.12	85%
Adhesive	7.71	86.10%	0.00%	86.10%	9.60E-05	135	6.64	0.09	2.06	0.38	0.01	85%
Primer	7.46	82.10%	0.00%	82.10%	4.00E-04	135	6.12	0.33	7.94	1.45	0.05	85%
Primer	7.46	82.10%	0.00%	82.10%	9.1E-04	135	6.12	0.75	18.06	3.30	0.11	85%
Primer	7.46	82.10%	0.00%	82.10%	9.6E-05	135	6.12	0.08	1.91	0.35	0.01	85%

**State Potential Emissions**

**2.82                      67.60                      12.3                      0.34**

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Sum of Coating Emissions + Sum of all Solvent Emissions

\*\*The gallon of material is as applied. The weight percent of the HAP is based on mix ratios as applied.

Appendix A: Emission Calculations

HAP Emission Emissions from Surface Coating Operations Associated with the Transfer Press

Company Name: Cooper Tire & Rubber Company  
 Address City IN Zip: 207 South West Street Auburn 46706  
 Permit No. : 033 - 14752  
 Plt ID: 033 - 00013  
 Reviewer: ERG/AB  
 Date: 12/27/2001

LIMITED PTE

Material	Density (lb/gal)	Gallons of Material** (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylbenzene	Weight % MIBK	Weight % Phenol	Weight % Toluene	Weight % Formaldehyde	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Phenol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
Primer	7.46	5.00E-04	46.2	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.03	0.01	0.59	0.01	0.00	0.001
Primer	7.46	1.25E-03	46.2	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.07	0.02	1.46	0.02	0.00	0.001
Primer	7.46	9.6E-05	46.2	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.01	0.00	0.11	0.00	0.00	0.000
Adhesive	7.71	4.00E-04	46.2	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.07	0.03	0.00	0.00	0.45	0.000
Adhesive	7.71	9.1E-04	46.2	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.15	0.06	0.00	0.00	1.03	0.000
Adhesive	7.71	1.00E-04	46.2	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.02	0.01	0.00	0.00	0.11	0.000

Total State Potential Emissions

0.34 0.12 2.16 0.03 1.61 0.002

Total HAPs = 4.26 tons/yr

PTE

Material	Density (lb/gal)	Gallons of Material** (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylbenzene	Weight % MIBK	Weight % Phenol	Weight % Toluene	Weight % Formaldehyde	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	MIBK Emissions (ton/yr)	Phenol Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)
Primer	7.46	5.00E-04	135	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.08	0.02	1.71	0.02	0.00	0.00
Primer	7.46	1.25E-03	135	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.21	0.05	4.28	0.05	0.01	0.00
Primer	7.46	9.6E-05	135	3.78%	0.98%	77.60%	0.91%	0.14%	0.07%	0.02	0.00	0.33	0.00	0.00	0.00
Adhesive	7.71	4.00E-04	135	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.19	0.08	0.00	0.00	1.33	0.00
Adhesive	7.71	9.1E-04	135	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.44	0.18	0.00	0.00	3.02	0.00
Adhesive	7.71	1.00E-04	135	10.60%	4.30%	0.00%	0.00%	72.90%	0.00%	0.05	0.02	0.00	0.00	0.33	0.00

Total State Potential Emissions

0.99 0.36 6.32 0.07 4.70 0.01

Total HAPs = 12.4 tons/yr

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

\*\*The gallon of material is as applied. The weight percent of the HAP is based on mix ratios as applied.